

Title (en)  
A PHOSPHATE COATING WHICH CAN BE SUBSTANTIALLY FREE OF HEXAVALENT CHROMIUM AND METHODS OF MAKING THE SAME

Title (de)  
PHOSPHATÜBERZUG, DER IM WESENTLICHEN FREI VON SECHSWERTIGEM CHROM SEIN KANN, UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
REVÊTEMENT À BASE DE PHOSPHATE POUVANT ÊTRE SENSIBLEMENT EXEMPT DE CHROME HEXAVALENT ET SES PROCÉDÉS DE FABRICATION

Publication  
**EP 4019593 A1 20220629 (EN)**

Application  
**EP 21215276 A 20211216**

Priority  
US 202017131972 A 20201223

Abstract (en)  
Disclosed is a phosphate coating, comprising: a phosphate portion, wherein the phosphate portion comprises pores, wherein the pores are at least partially filled with a corrosion inhibition sealant, wherein the corrosion inhibition sealant comprises: a base, wherein the base comprises a matrix and a metal within the matrix, wherein the metal within the matrix comprises aluminum, an aluminum alloy, zinc, a zinc alloy, magnesium, a magnesium alloy, or a combination thereof; and an inhibitor mixed within the base, wherein the inhibitor comprises zinc molybdate, magnesium metasilicate, trivalent chromium, tungstenate, a metal phosphate silicate, or a combination thereof.

IPC 8 full level  
**C09D 5/00** (2006.01)

CPC (source: EP US)  
**C09D 5/00** (2013.01 - EP); **C23C 22/182** (2013.01 - US); **C23C 22/76** (2013.01 - US); **C23C 22/83** (2013.01 - US); **C23C 28/34** (2013.01 - US); **C23F 11/188** (2013.01 - US)

Citation (search report)

- [X] US 2020189975 A1 20200618 - WAGH ARUN S [US]
- [X] WO 2018193223 A2 20181025 - JACKSON MICHAEL [GB]
- [X] US 2013139930 A1 20130606 - WAGH ARUN S [US], et al
- [X] WO 2011075712 A2 20110623 - LATITUDE 18 INC [US], et al
- [X] EP 0256908 A1 19880224 - SERMATECH INT INC [US]

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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